



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/790,316

03/01/2004

Richard A. Haase

CV-49

1953

45922 7590 11/10/2010
RICHARD A. HAASE (INVENTOR)
4402 RINGROSE DRIVE
MISSOURI CITY, TX 77459

EXAMINER

NGUYEN, HOANG M

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

11/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,316	Applicant(s) HAASE, RICHARD A.	
	Examiner Hoang M. Nguyen	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 216-220, 222-229, 231, 232, 235, 237-253, 258-260, 342 and 350 is/are pending in the application.
- 4a) Of the above claim(s) 261-341 and 343-349 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 216-220, 223-224, 228-229, 231-232, 235, 238-240, 243-253, 258-260, 342, 350 is/are rejected.
- 7) ☒ Claim(s) 225-227, 237, 241 and 242 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's amendment dated September 23, 2010, has been fully considered.

Once again, Applicant refused to amend any claims or file an appeal brief, and presented arguments against the rejections instead. Most arguments have been repeated from the prior amendments. Once again, Applicant's amendment and declarations have been reviewed and it's concluded that this application is not allowable. The Examiner strongly suggests that Applicant should either amend his claims or file an appeal brief to advance prosecution of this application following this Office Action because it seems Applicant keeps on repeating the same arguments and declarations which have been well addressed before.

In this Office Action, the Examiner withdraws the rejections of dependent claims 225-227, 237, 241-242. It's suggested that the subject matter of any of those dependent claims be added to the independent claim 216 to put this application for allowance. If Applicant refuses to amend his claims, the best way to resolve all issues is to appeal this application because Applicant and the Examiner are unable to come up with an agreement.

Applicant stated "While Applicant may be Pro Se', Applicant has experience in these matters in the prosecution of many patents ... ". Please note that the Examiner has always treated this application fairly. The fact that Applicant is a Pro Se' has totally

Art Unit: 3748

no effect to the prosecution process. The Examiner simply suggests Applicant to either amend his claims or appeal to upper level because no agreement has been reached.

Applicant argued on page 8 of this amendment, "1) Tindell does not teach the combustion of water, water is not combustible". It appears Applicant misunderstands the Examiner's statement. What the Examiner meant was water was injected into the combustion chamber of Tindell. This is exactly recited in the claimed invention. Note claim 216.

Applicant argued "2) Penfornis requires flue gas from combustion ..". The Examiner agrees with that but fails to understand why that could invalidate the 103 rejection.

Applicant argued on page 9 "3) Pernfornis, et al. cannot function without flue gas from combustion, and 4) the instant claims does not comprise flue gas from combustion". Please note it does not matter if the claims recite the flue gas or not, as long as the applied references teach all the claimed subject matter, the rejection is valid.

Applicant argued "the instant claim comprises either rotating mechanical energy or steam from combustion (torque and H₂O are not flue gas) from combustion to power air separation". As best understood, Applicant argued that Penfornis does not use steam or mechanical energy to drive the air separation system. This argument is fatally

Art Unit: 3748

erroneous. Note column 6, lines 1-9, Penfornis states "Mechanical power produced by steam turbine 22 is used either to generate shaft power via shaft 25 ... Preferably, the mechanical power is used to drive compressor 2, thereby reducing a power consumption of the air separation system 4". Note the compressor 2 is part of the air separation system 4. Penfornis clearly states as noted above that the mechanical energy drive the compressor, and said mechanical energy is from the steam turbine. This is EXACTLY what Applicant recites in his claims.

Applicant argued "Penfornis teaches use of a "flue gas" from combustion to produce heated steam". As best understood, Applicant argued that the flue gas is driving the steam cycle. Please note the combustion chamber with water is already taught in Tindell. Note combustion chamber 33 with water nozzle 31 in Tindell. Penfornis is relied upon to teach the separation unit and the concept that the mechanical energy of the steam turbine is used to drive the air separation unit. In this Office Action, the Examiner modifies the wording of the rejection to remove the flue gas if Applicant has problem with the flue gas.

Applicant argued "the Examiner is a moving target", then pointed out a part of the declaration from Walker "I have reviewed the pending claims as of this date within U.S. Patent Application 10/790,316 and compared with the prior art cited by the Patent Examiner ... I do not find this prior art cited by the Patent Examiner to have made the pending claims within U.S. Patent Application 10/790,316". The Examiner disagrees

Art Unit: 3748

because Walker jumped to the conclusion without comparing details of the applied references versus the claimed invention. The declaration can't simply say "compared" without detail analysis. The declaration of Chester Vaughan is similar to the declaration of Walker, fails to provide detail analysis. Also note that even if the declarations provide detail analysis and arguments, it's still within the Examiner's authority to make final decision. It's further noted that the pending claims are so broad and not allowable, filing declarations unlikely overcome the rejections. The Examiner would like to repeat the following paragraph from the previous Office Action.

Applicant argued the Examiner cites the MPEP section 716.02(e) is about the claimed range. The Examiner disagrees because the claimed range section does not belong to MPEP section 716.02(e) but to the preceding section 716.02(d).

Nevertheless, all sections are under MPEP 716 can be used to treat the affidavit under 37 CFR 1.132. Again, the Examiner would like to repeat the following paragraph from the previous Office Action. Applicant argued the declaration under rule 312 is directed to the claimed invention, not the invention. The Examiner strongly disagrees. First, Applicant simply provides his own argument, this is improper, Applicant's argument cannot replace evidence in affidavit 312, note MPEP 716.01(c). Second, the declarations fail to compare the claimed subject matter with the closest prior art as required in MPEP 716.02(e), it's unclear how Applicant can jump to a conclusion that his declaration could overcome the pending rejections without providing any comparison with the prior art, or any opinion about the rejection in the declaration. Third and most

Art Unit: 3748

importantly, even assuming arguendo that the declaration meet all the requirements that provide evidences, comparison with prior art, opinions about the pending rejections, the Examiner still needs to use his judgment of a person having ordinary skill in the art to make his decision.

Once again, Applicant is suggested to amend his independent claims to include the subject matter of any of the dependent claims 225-227, 237, 241, 242, to put this application in condition for allowance. The claims in the current condition are not allowable and filing declarations unlikely advance the prosecution of this application.

The rejections have been repeated as follows.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 216, 218-220, 222, 224, 231, 235, 238-240, 243, 248-253, 258, 342, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4841731 (Tindell) in view of U.S. 7062912 (Penfornis et al).

Tindell discloses a solar energy system comprising an electrolysis chamber 13 for forming hydrogen being stored in an hydrogen tank 22, oxygen being stored in an oxygen tank 21, a combustion chamber 33 for burning said hydrogen and oxygen, water

Art Unit: 3748

input nozzle 31 for injecting water into the combustion chamber, said combustion chamber is then acting as a steam generator to generate steam to drive a steam turbine 47 to generate electricity through a generator 48. Tindell does not teach the air separation unit being powered partly by the combustion energy, the cryogenic air separation unit or membrane air separation unit. Penfornis et al discloses a system using an air separation unit 4 which can be cryogenic air separation unit, membrane separation unit, or adsorptive PSA or VSA (note column 5, lines 1-5), said air separation unit 4 forming oxidant gas 3 flowing into a combustion chamber (furnace 15) to drive a steam turbine cycle, the mechanical output of the steam turbine 22 is used to drive said air separation unit 4 through a compressor 2, note abstract lines 10-12, Penfornis et al clearly states "The heated steam flows through a turbine to produce power; the power is transferred to the air separation unit, thus reducing a power requirement of the air separation unit needed to separate the air; note column 6, lines 1-9, Penfornis states "Mechanical power produced by steam turbine 22 is used either to generate shaft power via shaft 25 ... Preferably, the mechanical power is used to drive compressor 2, thereby reducing a power consumption of the air separation system 4" . It would have been obvious to provide an air separation unit (either cryogenic, membrane, or adsorption types) in Tindell as taught by Penfornis et al for the purpose of more effectively forming oxygen for the combustion process, and to use the output of the steam turbine in Tindell to drive the air separation unit as taught by Penfornis et al to reserve power input because of the power feedback.

Claim 223 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4841731 (Tindell) in view of Penfornis et al and U.S. 6588212 (Wallace et al). Tindell as modified by Penfornis et al discloses all the claimed subject matter as set forth above, but does not disclose the use of nitrogen in a mixture of the combustion chamber. Wallace et al teaches it's well known to use nitrogen in a gas mixture before feeding into a combustion chamber to help increase power generation (note column 1, lines 23-32). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide nitrogen in Tindell as taught by Wallace et al for the purpose of increasing power generation.

Claims 231, 235 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4841731 (Tindell) in view of Penfornis et al and U.S. 5516359 (Kang et al). Tindell as modified by Penfornis et al discloses all the claimed subject matter as set forth above, but does not disclose the use of air separation unit with membrane. Kang et al is relied upon to disclose it's well known to use air separation unit 107 with membrane 108 for separating air. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use an air separation unit with membrane in Tindell as taught by Kang et al for the purpose of separating air to form more important components if needed.

Claims 259-260, 350, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4841731 (Tindell) in view of Penfornis et al and US 6212876

Art Unit: 3748

(Gregory et al). Tindell as modified by Performis et al discloses all the claimed subject matter as set forth above, but does not disclose the jet propulsion rocket. US 6212876 (Gregory et al) teaches a rocket propulsion engine using combustion engine. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use jet propulsion rocket in Tindell as taught by Gregory et al for the purpose of driving rocket if needed (note it's well known to use combustion engine such as gas engine to produce thrust in aircraft/rocket design).

Claims 244-247 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4841731 (Tindell) in view of Performis et al and U.S. 6698183 (Thordarson). Tindell as modified by Performis et al discloses all the claimed subject matter as set forth above, but does not disclose the use of flywheel and transmission. Thordarson is relied upon to disclose it's well known to use flywheel 176 and transmission 178 for transmitting power from a combustion chamber/engine 22. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use flywheel and transmission in Tindell as taught by Thordarson for the purpose of transmitting power output of the combustion engine.

Claims 225-227, 237, 241, 242, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3748

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
11/9/2010

Application/Control Number: 10/790,316
Art Unit: 3748

Page 11